

# Present Weather Sensor SWS 200



## SPECIFICATIONS

*Specifications subject to change without notice*

Visibility & Precipitation Measurements	
Range	selectable: 2 km, 10 km, 20 km, 32 km or 50 km
Measures	Visibility (MOR - Meteorological Optical Range) reductions caused by : fog, haze, smoke, sand, drizzle, rain, snow and general precipitation
Measurement accuracy	<=10% maximum
Precipitation detection	rain: 0.015 mm/hr (0.0006 in/hr)
Resolution:	snow: 0.0015 mm/hr (0.00006 in/hr)
Maximum rain rate	250 mm/hr (10 in/hr)
Rain rate accuracy	<=15%
Intensities	light (-). moderate, heavy (+)
Outputs and reports	
Output rate (seconds)	10 to 300 (selectable)
Digital (serial) outputs	RS-232, RS-422, RS-485
Analogue outputs	0-10 V (4-20 mA or 0-20 mA optional)
Switching relays (providing flexible configurations)	Relay 1 = fault Relay 2 = visibility (user selectable threshold) Relay 3 = precipitation yes/no or snow yes/no or 2nd visibility (user selectable)
Outputs	selected WMO 4680 table codes
Power Requirements	
Power supply	9-30 VDC (AC with optional mains adaptor)
Power consumption	6 W-normal running - window heaters OFF 2.5 W - window heaters OFF 57 W - using optional de-icing heaters at 51 W
Environmental	
Operating temperature	-40°C to +60°C
Operating humidity	0 - 100% RH
Physical	
Material	Powder coated aluminium (IP65 protected)
Weight	3.3 Kg
Dimensions	811mm (w) x 315mm (h) x 330mm (d)
Maintenance	
Self test functions	with maintenance warnings
User confidence check	6 months (suggested)
Window cleaning	3 months (suggested)
Options	
De-icing hood heaters	Optional (No-dew window heaters are standard.)
Extra self test mode	transmitter window contamination monitoring
Certification & Compliance	
CE certified	RoHS and WEEE compliant
EMC compliance with EN61326-1997, 1998, 2001	

**Monitors extended present weather to identify visibility and precipitation. Easily integrated into meteorological networks and data controllers.**

- ▶ Selectable measurement range
- ▶ Precipitation type, intensity & accumulation outputs
- ▶ Instantaneous and averaged visibility outputs
- ▶ Date and time stamp on data strings
- ▶ 2 adjustable relays and 1 fault relay
- ▶ Analogue outputs of visibility range
- ▶ Extended self test and maintenance information
- ▶ The extended visibility range up to 50 km exceeds the usual limit of 16 km for obstruction to vision information required by national weather services and standard coding procedures.
- ▶ The enhanced present weather information from the SWS-200 is due to the backscatter receiver which allows detailed precipitation analysis including precipitation intensity information and accumulation totals for 24 hour periods.

## ORDERING

<b>SWS-200</b>	Present Weather Sensor (delivered in sturdy recyclable foam filled packaging w 3m RS232 auxiliary cable, pole mounting kit (U bolt, saddle and bolts)\, (manual, cal. certificate
<b>Accessories</b>	Power & data cables. Mains power adaptor. Calibration kit (for user checks). Hard shell transit case. Post adaptor (for mounting to HA posts)